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THE CORRECT NAME FOR
THE SUBSPECIES OF
LIMENITIS WEIDEMEYERII
OCCURRING IN ARIZONA (NYMPHALIDAE)

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THERE APPEARS TO BE CONSIDERABLE CONFUSION in the literature concerning the correct name to be used for the population of *Limenitis weidemeyerii* Edwards (1861, p. 162) occurring in Arizona. The latest authors to publish on this subspecies, although not giving particular attention to the problem of the correct name, are Perkins and Garth ("1972" [1973], p. 229). They use the name *angustifascia* Barnes and McDunnough (1912, p. 163). Prior to Perkins and Garth, Brown (1967, pp. 371, 372), apparently to be on the safe side, had used *sinefascia* as a subspecies and even a specific name. In a couple of instances he even wrote the name with a hyphen ("*sine-fascia*").

It would be well to examine the synonymy of these names to see just what has been going on and to reach a correct conclusion as to the proper name to use in the light of the language of the International Code of Zoological Nomenclature (1964). Incidentally, the Code was further amended at Monte Carlo in 1972, and a new edition is promised for the end of 1973. So far as the author recollects, none of these amendments affect the questions discussed in this paper.

The synonymy of ab. *sinefascia* Edwards (1882) and *angustifascia* Barnes & McDunnough (1912) is as follows:

Limenitis weidemeyerii aber. *sine-fascia* Edwards, 1882, p. 22, type locality near Tucson, Arizona, corrected by Brown (1967, p. 371) to near Prescott, Arizona

Limenitis weidemeyerii aber. *sine-fascia* Edwards, 1884, p. 43, no. 238.

Limenitis weidemeyerii aber. *sine-fascia* Edwards, Smith, 1891, p. 2, no. 158

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- Limenitis weidemeyerii* aber. *sine-fascia* Edwards, Skinner, 1898, p. 29, no. 163
- Basilarchia weidemeyerii sinefascia* Edwards, Dyar, "1902" [1903], p. 26, no. 238
- Limenitis weidemeyerii sinefascia* Edwards, Smith et al., 1903, p. 4, no. 177a
- Limenitis sinefascia*; Wright, 1905, p. 180, no. 238
- Basilarchia weidemeyerii angustifascia* (Barnes & McDunnough), 1912, p. 163, type locality White Mountains, Arizona; type *ex coll.* Barnes, U. S. Nat. Mus.
- Basilarchia weidemeyerii* aber. *sinefascia* Edwards, (Barnes & McDunnough), 1912, p. 163
- Basilarchia weidemeyerii angustifascia* aber. *sinefascia* Edwards, (Barnes & McDunnough), 1917, p. 12, no. 306a
- Limenitis weidemeyerii* aber. *sinefascia* Edwards, Seitz, "1924" (1915), p. 534
- Limenitis weidemeyerii* form normal *angustifascia* Barnes & Benjamin, 1924, p. 99 (*lapsus calami*)
- Basilarchia weidemeyerii sinefascia*; (Barnes & Benjamin), 1924, p. 99
- Basilarchia sinefascia* (Edwards), (Barnes & Benjamin), 1926, p. 15, no. 309
- Basilarchia weidemeyerii sinefascia* form normal *angustifascia* (Barnes & McDunnough), Barnes & Benjamin, 1926, p. 15, no. 309b
- Basilarchia astyanax arizonensis* aber. *sinefascia* Edwards, Gunder, 1934, p. 44
- Basilarchia weidemeyerii sinefascia* Edwards, McDunnough, 1938, p. 22, no. 323b
- Basilarchia weidemeyerii sinefascia* form normal *angustifascia* Barnes & McDunnough, McDunnough, 1938, p. 22, no. 323a
- Limenitis weidemeyerii angustifascia* Barnes & McDunnough, Bauer, 1952, p. 130
- Limenitis weidemeyerii sine-fascia* Edwards, Bauer, 1954, p. 130
- Limenitis weidemeyerii sinefascia* Edwards (= *angustifascia* Barnes & McDunnough, 1912), dos Passos, 1964, p. 75, no. 519
- Limenitis weidemeyerii sinefascia*; Brown, 1967, p. 371
- Limenitis sine-fascia*; Brown, 1967, p. 371
- Limenitis sinefascia* Edwards, Brown, 1967, p. 372, fig. 17 (holotype)
- Limenitis weidemeyerii angustifascia*; Perkins & Garth, "1972" [1973], p. 229
- Limenitis weidemeyerii angustifascia* aber. *sinefascia* Edwards, Perkins & Garth, "1972" [1973], p. 229

From this synonymy it is clear that "*sine-fascia*" was proposed as an aberrational name and hence, as Brown (1967, p. 371) states correctly, it had no standing in nomenclature. However, he is in error in stating (*ibid.*) that Barnes & Benjamin (1926, p. 15) were the first authors to give it specific or subspecific standing and hence it must be ascribed to them. As we have seen, the first author to give *sinefascia* subspecific standing is Dyar ("1902", [1903], p. 26), so that name must be ascribed to Dyar. Since Dyar was assisted in writing his list of North

American Lepidoptera by C. H. Fernald, George D. Hulst, and August Bush, perhaps the name will have to be ascribed to Dyar *et al.* This action of Dyar does not appear to have been followed by subsequent authors, and Barnes & McDunnough (1912) even proposed *angustifascia* for the Arizona population of *L. weidemeyerii* but later (1924) recognized *sinefascia* as the correct name and gave their new name the style form normal "*angustifascia*" [*sic*]. Since that time most authors have considered *sinefascia* as the correct name, although Bauer (1951) slipped back into writing it with a hyphen. Then along came Brown (1967) who exhausted all three possibilities, i.e., specific, subspecific, and hyphenated, the latter contrary to the Code (Art. 26 a-c, 27, 34) as well as stating incorrectly that Barnes & Benjamin (1926) had given it subspecific standing when Dyar had done that 23 years earlier!

While the Code permits an aberrational name to be raised to specific or subspecific rank (Art. 10b), there is no provision for reducing an aberrational name to its prior status or for naming a normal individual. So for the present, *angustifascia* must be considered a synonym of *sinefascia* and the authorship of that name changed from Edwards, 1882, to Dyar *et al.*, "1902" [1903]. No objection is seen to treating *angustifascia* as the normal form until the Code is amended to cover this situation.

Since both *Limenitis astyanax arizonensis* Edwards, (1882) and *L. weidemeyerii sinefascia* Dyar ("1902" [1903]) occur in Arizona, it is possible that *sinefascia* is actually a hybrid similar to ab. *doudoroffi* (Gunder, 1934). This was suggested by Perkins and Garth ("1972" [1973], p. 232), and it is to be hoped that someone nearer to the scene than the present author may be able to pursue this problem.

The type of ab. *doudoroffi* is in The American Museum of Natural History.

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